

IN THE CLAIMS:

Listing of Claims:

Claims 1-26 (Canceled)

Claim 27 (Currently Amended): A differential unit of a motor vehicle for transmitting a driving force to a pair of driving wheels while absorbing a rotational difference there between, comprising:

a case;

a differential mechanism accommodated in the case;

a drive pinion shaft for transmitting the driving force to the differential mechanism, said drive pinion shaft rotatably supported in the case with at least two bearings; and

a tubular spacer having an inner diameter larger than an outer diameter of the drive pinion shaft, said spacer interposed between the bearings such that the spacer covers the drive pinion shaft; and

said tubular spacer has at least one protruding section on an inner surface thereof to protrude in a radial direction toward the drive pinion shaft, said protruding section being formed to extend along an inner peripheral direction of the tubular spacer and to have a cross sectional shape which is convex along a central axis of the tubular spacer so that an innermost surface of the protruding section facing the shaft is arched; and

wherein said protruding section extends along an entire inner peripheral direction of the tubular spacer.

Claim 28 (Previously Presented): The differential unit according to claim 27, wherein said protruding section is configured so that said innermost surface of the protruding section is close to an outer surface of the drive pinion shaft.

Claim 29 (Previously Presented): The differential unit according to claim 27, wherein said protruding section is configured so that said innermost surface of the protruding section contacts with an outer surface of the drive pinion shaft.

Claim 30 (Previously Presented): The differential unit according to claim 27, wherein said protruding section is disposed at a central position along a central axial direction of the tubular spacer.

Claim 31 (Currently Amended): A differential unit of a motor vehicle for transmitting a driving force to a pair of driving wheels while absorbing a rotational difference there between, comprising:

a case;

a differential mechanism accommodated in the case;

a drive pinion shaft for transmitting the driving force to the differential mechanism, said drive pinion shaft rotatably supported in the case with at least two bearings; and

a tubular spacer having an inner diameter larger than an outer diameter of the drive pinion shaft, said spacer interposed between the bearings such that the spacer covers the drive pinion shaft; and

said tubular spacer has at least one protruding section on an inner surface thereof to protrude in a radial direction toward the drive pinion shaft, said protruding section being formed to extend along an inner peripheral direction of the tubular spacer and to have a cross sectional shape which is convex along a central axis of the tubular spacer so that an innermost surface of the protruding section facing the shaft is arched; and

wherein said protruding section is disposed at a central position along a central axial direction of the tubular spacer; and

The differential unit according to claim 30,

wherein said protruding section is configured so that said innermost surface thereof is arched along an overall central axial direction of the tubular spacer.

Claims 32-35 (Canceled)

Claim 36 (Previously Presented): The differential unit according to claim 27, wherein said bearings positioned to opposite sides of said tubular spacer are non-identical.

Claim 37 (Previously Presented): The differential unit according to claim 36, wherein a first of said bearings is a ball bearing and a second of said bearings is a tapered roller bearing.

Claim 38-42 (Canceled)

Claim 43 (Previously Presented): The differential unit according to claim 27, wherein said protruding section is integrally formed on the innermost surface of the spacer.

Claim 44 (Previously Presented): The differential unit according to claim 43, wherein said protruding section and the spacer are monolithic.

Claim 45 (Previously Presented): The differential unit according to claim 27, further comprising:

a third bearing; and

a second tubular spacer disposed in between one of said at least two bearings and said third bearing.

Claim 46 (Canceled)

Claim 47 (Previously Presented): The differential unit according to claim 27, wherein said two bearings have an inner race respectively and said spacer is interposed between the inner races of said two bearings.

Claim 48 (Currently Amended): A differential unit of a motor vehicle for transmitting a driving force to a pair of driving wheels while absorbing a rotational difference therebetween, comprising:

a case;

a differential mechanism accommodated in the case;

a drive pinion shaft for transmitting the driving force to the differential mechanism, said drive pinion shaft rotatably supported in the case with at least two bearings having an inner race, respectively; and

a tubular spacer having an inner diameter larger than an outer diameter of the drive pinion shaft, said spacer interposed between the inner races of the bearings such that the spacer covers the drive pinion shaft; and

said tubular spacer has at least one protruding section on an inner surface thereof to protrude in a radial direction toward the drive pinion shaft, said protruding section being formed to extend along an inner peripheral direction of the tubular spacer and to have a cross sectional shape which is convex along a central axis of the tubular spacer so that an inner surface of the protruding section is arched; [[and]]

wherein said protruding section is disposed at a central position along a central axial direction of the tubular spacer; and

wherein said protruding section is configured so that an innermost surface thereof is arched along an overall central axial direction of the tubular spacer.

Claim 49 (Canceled)

Claim 50 (Previously Presented): The differential unit according to claim 48, wherein said protruding section is integrally formed on the innermost surface of the spacer.

Claim 51-53 (Canceled)

Claim 54 (Previously Presented): The differential unit according to claim 27, wherein said at least one protruding section is positioned closer to a central region of said tubular spacer than an end region of said tubular spacer.